

August 18, 2003
Case No.: DP-305851 (7500/95)
Serial No.: 09/981,082
Filed: October 16, 2001
Page 2

AMENDMENT TO THE CLAIMS

Claims 12-34 are currently pending in the application.

Please amend claims 13, 17, 21 and 29 as shown below.

The following listing of claims 1-34 will replace all prior versions, and listings, of claims in the application:

C1 1.-11. (Cancelled)

1. (Original) A method for controlling a damping force of a damper, said method comprising:

generating a first operating current as a function of a desired force level of the damping force;

determining a scale factor as a function of an operating temperature of the damper;

generating a second operating current as a product of the first operating current and the scale factor; and

providing the second operating current to the damper to thereby control the damping force as a function of the desired force level of the damping force and the operating temperature of the damper.

2. (Currently Amended) A method for controlling a damping force of a damper, said method comprising:

generating a first operating current as a function of a desired force level of the damping force;

determining a first temperature compensation factor in the form of a scale factor ~~and an offset value~~ as a function of an operating temperature of the damper and a relative velocity of the damper;

August 18, 2003

Case No.: DP-305851 (7500/95)

Serial No.: 09/981,082

Filed: October 16, 2001

Page 3

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determining a second temperature compensation factor in a form of an offset value as a function of the operating temperature of the damper and the relative velocity of the damper; and

providing a second operating current to the damper in response to a determination of the scale factor and the offset value.

14.3 (Previously Amended) A method for controlling a damping force of a damper, said method comprising:

generating a first operating current as a function of a desired force level of the damping force;

determining a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper;

providing a second operating current to the damper in response to a determination of the scale factor and the offset value;

generating a third operating current as a product of the first operating current and the scale factor; and

generating the second operating current as a summation of the third operating current and the offset value.

15.4 (Previously Amended) A method for controlling a damping force of a damper, said method comprising:

generating a first operating current as a function of a desired force level of the damping force;

determining a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper;

providing a second operating current to the damper in response to a determination of the scale factor and the offset value;

August 18, 2003
Case No.: DP-305851 (7500/95)
Serial No.: 09/981,082
Filed: October 16, 2001
Page 4

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generating a third operating current as a summation of the first operating current and the offset value; and

generating the second operating current as a product of the third operating current and the scale factor.

10.5 (Original) A device for controlling a damping force of a damper, said device comprising:

a first module operable to generate a first operating current as a function of a desired force level of the damping force; and

a second module operable to determine a scale factor as a function of an operating temperature of the damper and to generate a second operating current as a product of the first operating current and the scale factor,

wherein said second module is further operable to provide the second operating current to the damper to thereby control the damping force as a function of the desired force level of the damping force and the operating temperature of the damper.

10.6 (Currently Amended) A device for controlling a damping force of a damper, said device comprising:

a first module operable to generate a first operating current as a function of a desired force level of the damping force; and

a second module operable to determine a first temperature compensation factor in a form of a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper and to determine a second temperature compensation factor in a form of an offset value as a function of the operating temperature of the damper and the relative velocity of the damper, said second module is further operable to provide a second operating current to the damper in response to a determination of the scale factor and the offset value.

August 18, 2003

Case No.: DP-305851 (7500/95)

Serial No.: 09/981,082

Filed: October 16, 2001

Page 5

C1
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18.⁷ (Previously Amended) A device for controlling a damping force of a damper, said device comprising:

a first module operable to generate a first operating current as a function of a desired force level of the damping force; and

a second module operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper, said second module is further operable to provide a second operating current to the damper in response to a determination of the scale factor and the offset value,

wherein said second module is further operable to generate a third operating current as a product of the first operating current and the scale factor, and

wherein said second module is further operable to generate the second operating current as a summation of the third operating current and the offset value.

19.⁸ (Previously Amended) A device for controlling a damping force of a damper, said device comprising:

a first module operable to generate a first operating current as a function of a desired force level of the damping force; and

a second module operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper, said second module is further operable to provide a second operating current to the damper in response to a determination of the scale factor and the offset value,

wherein said second module is further operable to generate a third operating current as a summation of the first operating current and the offset value, and

wherein said second module is further operable to generate the second operating current as a product of the third operating current and the scale factor.

20.⁹ (Original) A system, comprising:

August 18, 2003

Case No.: DP-305851 (7500/95)

Serial No.: 09/981,082

Filed: October 16, 2001

Page 6

C1
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a damper operable to provide a damping force in response to a reception of a first operating current; and

a controller,

wherein said controller is operable to generate a second operating current as a function of a desired force level of the damping force,

wherein said controller is operable to determine a scale factor as a function of an operating temperature of the damper,

wherein said controller is operable to generate the first operating current as a product of the second operating current and the scale factor, and

wherein said controller is operable to provide the first operating current to the damper to thereby control the damping force as a function of the desired force level of the damping force and the operating temperature of the damper.

21. ¹⁰ (Currently Amended) A system, comprising:

a damper operable to provide a damping force in response to a reception of a first operating current; and

a controller,

wherein said controller is operable to generate a second operating current as a function of a desired force level of the damping force,

wherein said controller is operable to determine a first temperature compensation factor in a form of a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper and to determine a second temperature compensation factor in a form of an offset value as a function of the operating temperature of the damper and the relative velocity of the damper, and

wherein said controller is operable to provide the first operating current to the damper in response to a determination of the scale factor and the offset value.

August 18, 2003

Case No.: DP-305851 (7500/95)

Serial No.: 09/981,082

Filed: October 16, 2001

Page 7

C1 Cont
~~24.~~ ¹¹ (Previously Amended) A system, comprising:

a damper operable to provide a damping force in response to a reception of a first operating current; and

a controller,

wherein said controller is operable to generate a second operating current as a function of a desired force level of the damping force,

wherein said controller is further operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper,

wherein said controller is further operable to provide the first operating current to the damper in response to a determination of the scale factor and the offset value,

wherein said controller is further operable to generate a third operating current as a product of the second operating current and the scale factor, and

wherein said controller is further operable to generate the first operating current as a summation of the third operating current and the offset value.

¹²
~~25.~~ (Previously Amended) A system, comprising:

a damper operable to provide a damping force in response to a reception of a first operating current; and

a controller,

wherein said controller is operable to generate a second operating current as a function of a desired force level of the damping force,

wherein said controller is further operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper,

August 18, 2003

Case No.: DP-305851 (7500/95)

Serial No.: 09/981,082

Filed: October 16, 2001

Page 8

wherein said controller is further operable to provide the first operating current to the damper in response to a determination of the scale factor and the offset value,

wherein said controller is further operable to generate a third operating current as a summation of the second operating current and the offset value, and

wherein said controller is further operable to generate the first operating current as a product of the third operating current and the scale factor.

C1 Cont
~~24~~¹³ (Previously Added) A system, comprising:
a damper operable to generate a damping force; and
a controller including

a first module operable to generate a first operating current as a function of a desired force level of the damping force, and

a second module operable to determine a scale factor as a function of an operating temperature of said damper, said second module further operable to generate a second operating current as a product of the scale factor and the first operating current, wherein said controller is operable to communicate the second operating current to said damper.

~~25~~¹⁴ (Previously Added) The system of claim ~~24~~¹³, wherein said damper includes magnetorheological fluid.

~~26~~¹⁵ (Previously Added) The system of claim ~~24~~¹³, wherein said controller further includes a third module operable to generate a signal indicative of an ambient temperature of said damper.

August 18, 2003

Case No.: DP-305851 (7500/95)

Serial No.: 09/981,082

Filed: October 16, 2001

Page 9

C1
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27.¹⁶ (Previously Amended) The system of claim 24.¹³ wherein said controller further includes a third module operable to generate a signal indicative of a measured temperature of said damper.

28.¹⁷ (Previously Amended) The system of claim 24.¹³ wherein said controller further includes a third module operable to generate a signal indicative of an estimated temperature of said damper.

29.¹⁸ (Currently Amended) A system, comprising:
a damper operable to generate a damping force; and
a controller including
a first module operable to generate a first operating current as a function of a desired force level of the damping force,
a second module operable to determine a set of scale factors and a set of offset values as a function of an operating temperature of said damper, and
a third module operable to determine a scale factor of the set of scale factors and an offset value of the set of offset values as a function of a relative velocity of said damper, the scale factor being a first temperature compensation factor and the offset value being a second temperature compensation factor.

30.¹⁹ (Previously Amended) A system, comprising:
a damper operable to generate a damping force; and
a controller including
a first module operable to generate a first operating current as a function of a desired force level of the damping force,
a second module operable to determine a set of scale factors and a set of offset values as a function of an operating temperature of said damper,

August 18, 2003

Case No.: DP-305851 (7500/95)

Serial No.: 09/981,082

Filed: October 16, 2001

Page 10

c1
cont

a third module operable to determine a scale factor of the set of scale factors and an offset value of the set of offset values as a function of a relative velocity of said damper,

wherein said third module is further operable to generate a second operating current as a product of the scale factor and the first operating current;

wherein said third module is further operable to generate a third operating current as a summation of the offset value and the second operating current; and

wherein said controller is operable to communicate the third operating current to said damper.

31. ²⁹ (Previously Amended) A system, comprising:

a damper operable to generate a damping force; and

a controller including

a first module operable to generate a first operating current as a function of a desired force level of the damping force,

a second module operable to determine a set of scale factors and a set of offset values as a function of an operating temperature of said damper,

a third module operable to determine a scale factor of the set of scale factors and an offset value of the set of offset values as a function of a relative velocity of said damper,

wherein said third module is further operable to generate a second operating current as a summation of the offset value and the first operating current;

wherein said third module is further operable to generate a third operating current as a product of the scale factor and the second operating current; and

wherein said controller is operable to communicate the third operating current to said damper.

August 18, 2003

Case No.: DP-305851 (7500/95)

Serial No.: 09/981,082

Filed: October 16, 2001

Page 11

C1
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32. (Previously Added) The system of claim ¹⁸29, wherein said controller further includes a fourth module operable to generate a signal indicative of an ambient temperature of said damper.

²²
33. (Previously Amended) The system of claim ¹⁸29, wherein said controller further includes a fourth module operable to generate a signal indicative of a measured temperature of said damper.

²³
34. (Previously Amended) The system of claim ¹⁸29, wherein said controller further includes a fourth module operable to generate a signal indicative of an estimated temperature of said damper.
